

For Research Use Only

# Chk1 Polyclonal antibody

Catalog Number: 10362-1-AP

Featured Product

18 Publications



## Basic Information

<b>Catalog Number:</b> 10362-1-AP	<b>GenBank Accession Number:</b> BC004202	<b>Purification Method:</b> Antigen affinity purification
<b>Size:</b> 150ul , Concentration: 240 µg/ml by Bradford method using BSA as the standard;	<b>GeneID (NCBI):</b> 1111	<b>Recommended Dilutions:</b> WB 1:500-1:1000 IHC 1:50-1:500 IF 1:10-1:100
<b>Source:</b> Rabbit	<b>Full Name:</b> CHK1 checkpoint homolog (S. pombe)	
<b>Isotype:</b> IgG	<b>Calculated MW:</b> 54 kDa	
<b>Immunogen Catalog Number:</b> AG0409	<b>Observed MW:</b> 50-55 kDa	

## Applications

**Tested Applications:**  
FC, IF, IHC, WB, ELISA

**Cited Applications:**  
IHC, WB

**Species Specificity:**  
human, mouse, rat

**Cited Species:**  
human, mouse, rat

**Note-IHC: suggested antigen retrieval with TE buffer pH 9.0; (\*) Alternatively, antigen retrieval may be performed with citrate buffer pH 6.0**

**Positive Controls:**

**WB:** mouse thymus tissue, HeLa cells, K-562 cells

**IHC:** human lung cancer tissue,

**IF:** HepG2 cells,

## Background Information

In response to DNA damage, mammalian cells prevent cell cycle progression through the control of critical cell cycle regulators. CHK1 (synonym: CHEK1), a homolog of the Schizosaccharomyces pombe Chk1 protein kinase, is required for the DNA damage checkpoint. Human Chk1 protein is modified in response to DNA damage. In vitro Chk1 binds to and phosphorylate the dual-specificity protein phosphatases Cdc25A, Cdc25B, and Cdc25C, which control cell cycle transitions by dephosphorylating cyclin-dependent kinases. CHK1 can be autophosphorylated (PMID:22941630) and ubiquitinated (PMID:19276361). It has 3 isoforms produced by alternative splicing with the molecular weight of 54 kDa, 44 kDa and 50 kDa.

## Notable Publications

Author	Pubmed ID	Journal	Application
Andrew Best	25208576	Nat Commun	WB
Xiufang Song	26451628	Chem Res Toxicol	WB
Xia Li	30472087	EBioMedicine	WB

## Storage

**Storage:**

Store at -20°C. Stable for one year after shipment.

**Storage Buffer:**

PBS with 0.02% sodium azide and 50% glycerol pH 7.3.

Aliquoting is unnecessary for -20°C storage

**\*\*\* 20ul sizes contain 0.1% BSA**

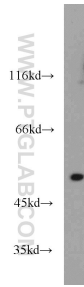
For technical support and original validation data for this product please contact:

T: 1 (888) 4PTGLAB (1-888-478-4522) (toll free in USA), or 1(312) 455-8498 (outside USA)

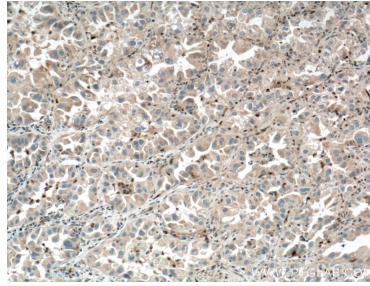
E: proteintech@ptglab.com  
W: ptglab.com

**This product is exclusively available under Proteintech Group brand and is not available to purchase from any other manufacturer.**

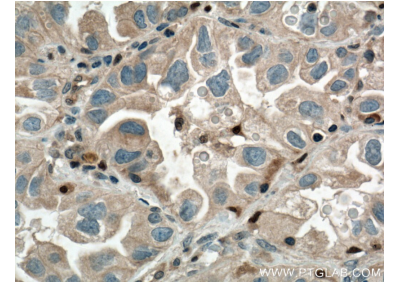
## Selected Validation Data



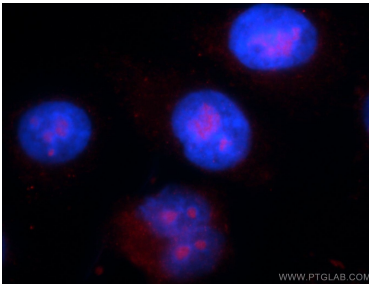
mouse thymus tissue were subjected to SDS PAGE followed by western blot with 10362-1-AP (CHK1 antibody) at dilution of 1:1000 incubated at room temperature for 1.5 hours.



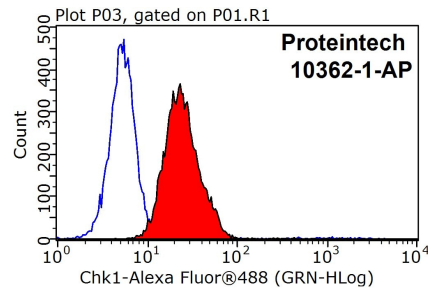
Immunohistochemical analysis of paraffin-embedded human lung cancer tissue slide using 10362-1-AP (CHK1 Antibody) at dilution of 1:200 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunohistochemical analysis of paraffin-embedded human lung cancer tissue slide using 10362-1-AP (CHK1 Antibody) at dilution of 1:200 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunofluorescent analysis of HepG2 cells using 10362-1-AP (Chk1 antibody) at dilution of 1:25 and Rhodamine-Goat anti-Rabbit IgG.



1X10<sup>6</sup> HepG2 cells were stained with 0.2ug CHK1 antibody (10362-1-AP, red) and control antibody (blue). Fixed with 90% MeOH blocked with 3% BSA (30 min). Alexa Fluor 488-conjugated AffiniPure Goat Anti-Rabbit IgG(H+L) with dilution 1:1000.